



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/722,479	11/28/2003	Gisle Bjontegaard	245615US2	9777	
22850	850 7590 05/24/2006		EXAMINER		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			RAO, ANAND SHASHIKANT		
	ANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
			2621	<u> </u>	
				DATE MAILED: 05/24/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/722,479	BJONTEGAARD, GISLE			
		Examiner	Art Unit			
		Andy S. Rao	2621			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)□	Responsive to communication(s) filed on					
′=		s action is non-final.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
4)🖂	Claim(s) <u>1-20</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□	Claim(s) is/are allowed.					
6)⊠	Claim(s) <u>1-4,7-14 and 17-20</u> is/are rejected.					
· · · · · ·	Claim(s) <u>5,6,15 and 16</u> is/are objected to.					
8)□	8) Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers					
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
A44- 1	60					
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) 🛛 Inforn	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date <u>9/27/04</u> .		atent Application (PTO-152)			

Art Unit: 2621

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Application/Control Number: 10/722,479

Page 3

Art Unit: 2621

3. Claims 1-4, 7-14, 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al., (hereinafter referred to as "Kim").

Kim discloses a method in video coding for determining a motion vector prediction associated with a target block of pixels representing a certain area of a video picture (Kim: paragraph [0010], lines 1-13), comprising the steps of: calculating respective vector differences between a primary set of motion vectors associated with a first number of blocks adjacent to the target block (Kim: paragraph [0050], lines 10-12) and one or more of a secondary set of motion vectors respectively associated with a second number of blocks also adjacent to the target block (Kim: paragraph [0051], lines 1-8: MVD2), and selecting a motion vector among said primary set of motion vectors corresponding to a smallest one of said vector differences or to a smallest sum of vector differences associated with the respective motion vectors of said primary set as the motion vector prediction (Kim: paragraph [0060], lines 1-14), as in claim 1.

Regarding claim 2, Kim discloses wherein the first number of blocks is localized close to a leftmost upper corner of the target block (Kim: figure 3, MVa, MVb), and the second number of blocks is localized close to a rightmost upper corner of the target block (Kim: figure 3, MVc), as in the claim.

Regarding claims 3-4, Kim discloses that the first number of blocks includes a first and a second block (Kim: figure 3, MVa, MVb), and the second number of blocks includes a third block (Kim: figure 3, MVc), as in the claims.

Regarding claim 7, Kim discloses wherein some blocks of said first number of blocks is included in said second number of blocks (Kim: paragraph [0050], lines 10-14), as in the claim.

Regarding claims 8-9, Kim discloses that the first number of blocks includes a first and a second block (Kim: figure 3, MVa, MVb), and the second number of blocks includes a third block (Kim: figure 3, MVc), as in the claims.

Regarding claim 10, Kim discloses wherein some blocks of said first number of blocks is included in said second number of blocks (Kim: paragraph [0050], lines 10-14), as in the claim.

Kim discloses a computer program product (Kim: paragraph [0013], lines 15-18) for determining a motion vector prediction associated with a target block of pixels representing a certain area of a video picture (Kim: paragraph [0010], lines 1-13), comprising the steps of: a first computer coded configured to calculate (Kim: paragraph [0013], lines 15-18) respective vector differences between a primary set of motion vectors associated with a first number of blocks adjacent to the target block (Kim: paragraph [0050], lines 10-12) and one or more of a secondary set of motion vectors respectively associated with a second number of blocks also adjacent to the target block (Kim: paragraph [0051], lines 1-8: MVD2); and a second computer code configured to select (Kim: paragraph [0013], lines 15-18) a motion vector among said primary set of motion vectors corresponding to a smallest one of said vector differences or to a smallest sum of vector differences associated with the respective motion vectors of said primary set as the motion vector prediction (Kim: paragraph [0060], lines 1-14), as in claim 11.

Regarding claim 12, Kim discloses wherein the first number of blocks is localized close to a leftmost upper corner of the target block (Kim: figure 3, MVa, MVb), and the second number of blocks is localized close to a rightmost upper corner of the target block (Kim: figure 3, MVc), as in the claim.

Regarding claims 13-14, Kim discloses that the first number of blocks includes a first and a second block (Kim: figure 3, MVa, MVb), and the second number of blocks includes a third block (Kim: figure 3, MVc), as in the claims.

Regarding claim 17, Kim discloses wherein some blocks of said first number of blocks is included in said second number of blocks (Kim: paragraph [0050], lines 10-14), as in the claim.

Regarding claims 18-19, Kim discloses that the first number of blocks includes a first and a second block (Kim: figure 3, MVa, MVb), and the second number of blocks includes a third block (Kim: figure 3, MVc), as in the claims.

Regarding claim 20, Kim discloses wherein some blocks of said first number of blocks is included in said second number of blocks (Kim: paragraph [0050], lines 10-14), as in the claim.

Allowable Subject Matter

4. Claims 5-6 and 15-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yamaguchi discloses a video encoding apparatus and video decoding apparatus.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao Primary Examiner Art Unit 2621

asr May 22, 2006 ANDY RAO PRIMARY EXAMINER